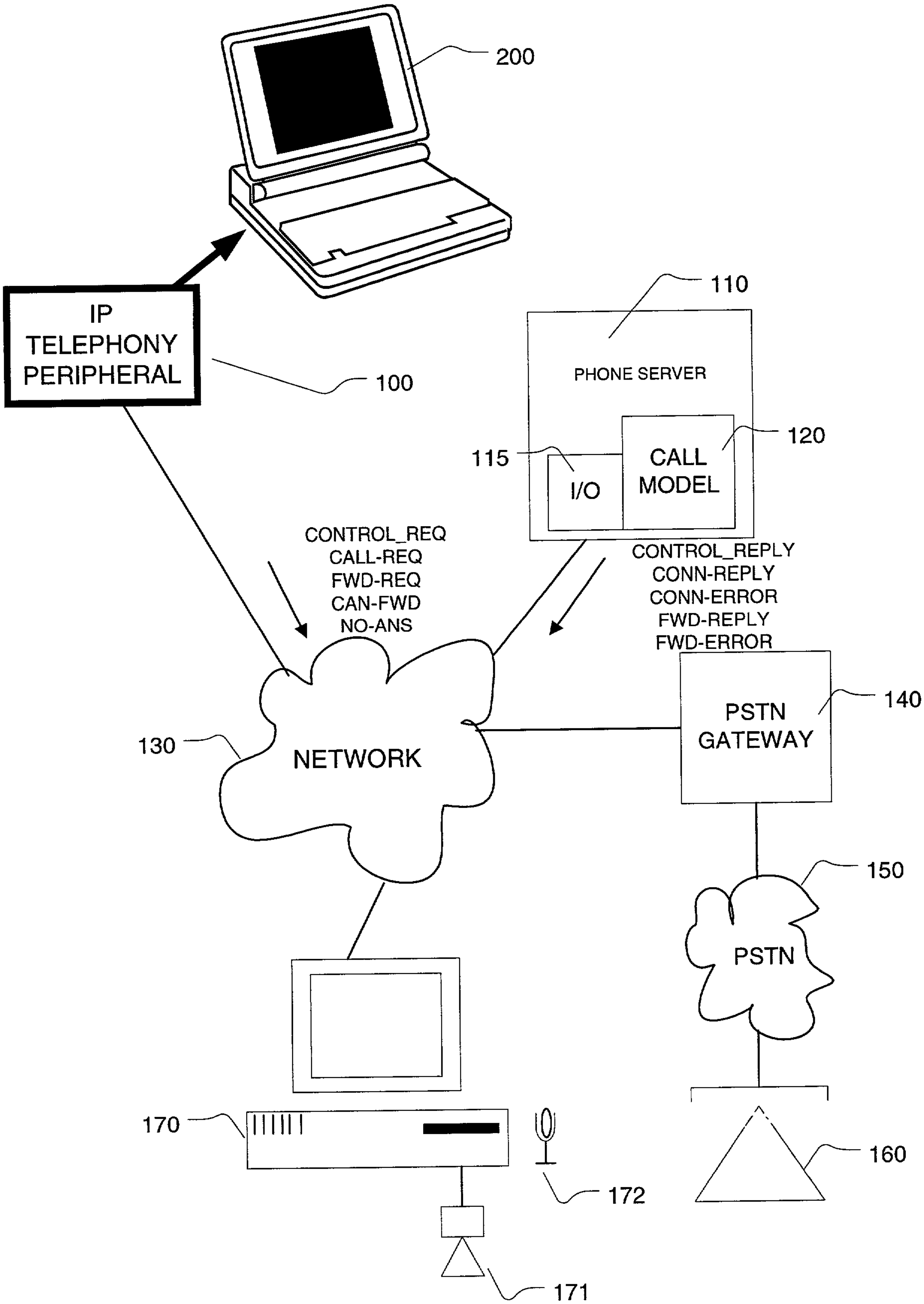
200
IP
TELEPHONY
PERIPHERAL
100
110
PHONE SERVER
120
115
I/O
CALL
MODEL
CONTROL_REQ
CALL-REQ
FWD-REQ
CAN-FWD
NO-ANS
CONTROL_REPLY
CONN-REPLY
CONN-ERROR
FWD-REPLY
FWD-ERROR
140
PSTN
GATEWAY
130
NETWORK
150
PSTN
170
172
160
171

FIG. 1

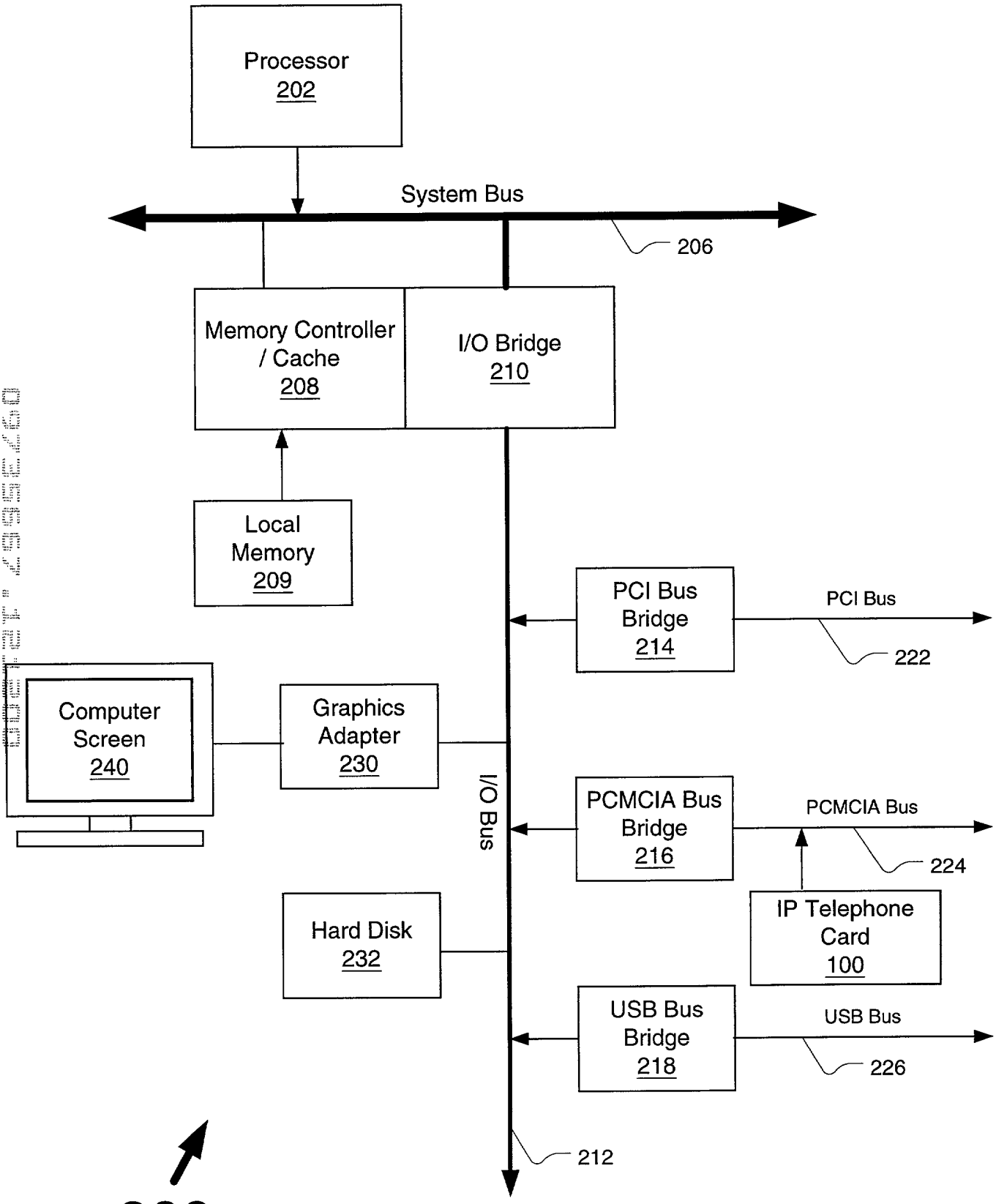
Processor
202
System Bus
206
Memory Controller
/ Cache
208
I/O Bridge
210
Local
Memory
209
PCI Bus
Bridge
214
PCI Bus
222
Computer
Screen
240
Graphics
Adapter
230
I/O Bus
PCMCIA Bus
Bridge
216
PCMCIA Bus
224
IP Telephone
Card
100
Hard Disk
232
USB Bus
Bridge
218
USB Bus
226
212
200

FIG. 2

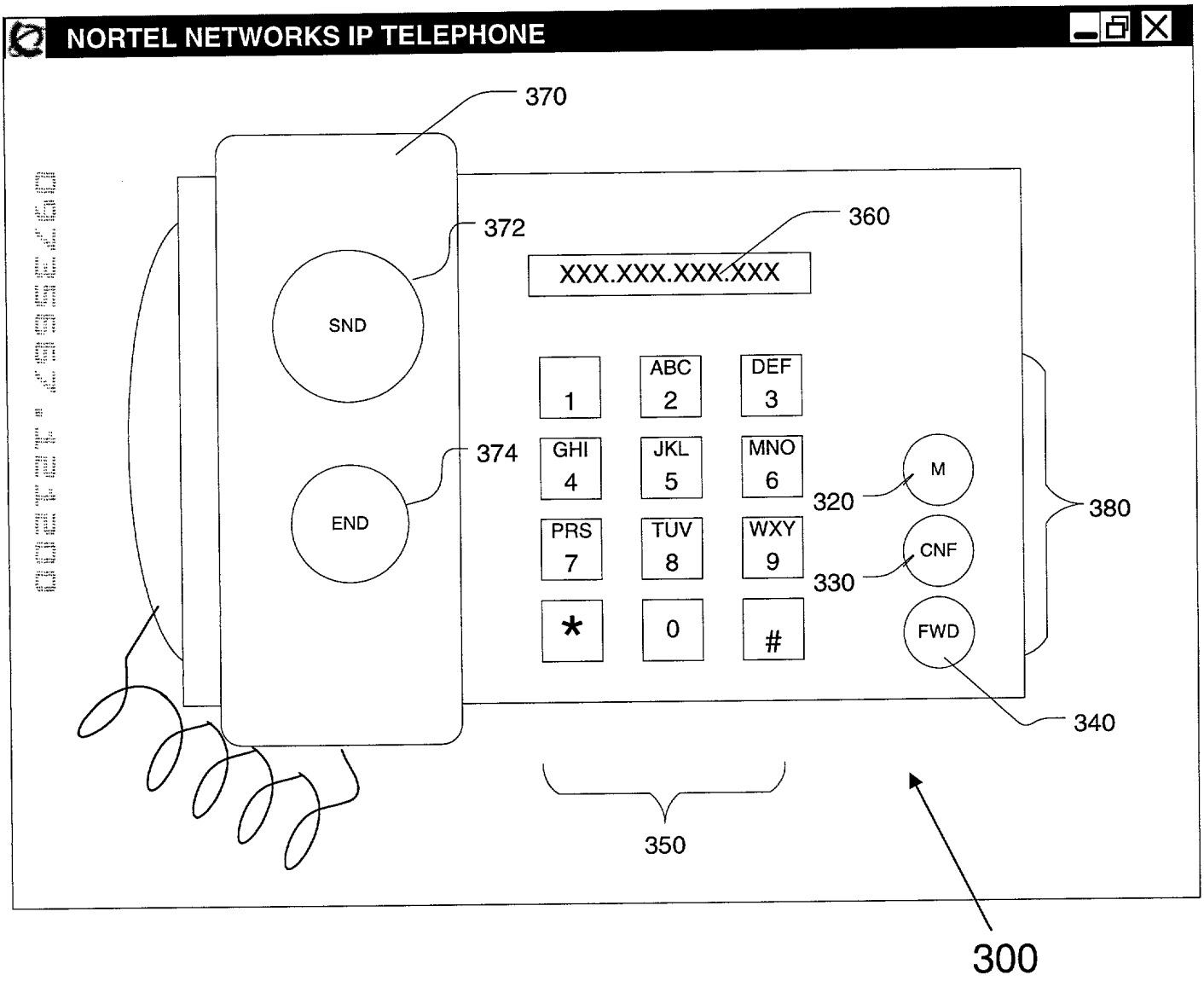
NORTEL NETWORKS IP TELEPHONE
370
372
360
XXX.XXX.XXX.XXX
SND
1
ABC 2
DEF 3
374
END
GHI 4
JKL 5
MNO 6
M
320
380
PRS 7
TUV 8
WXY 9
CNF
330
*
0
#
FWD
340
350
300

FIG. 3

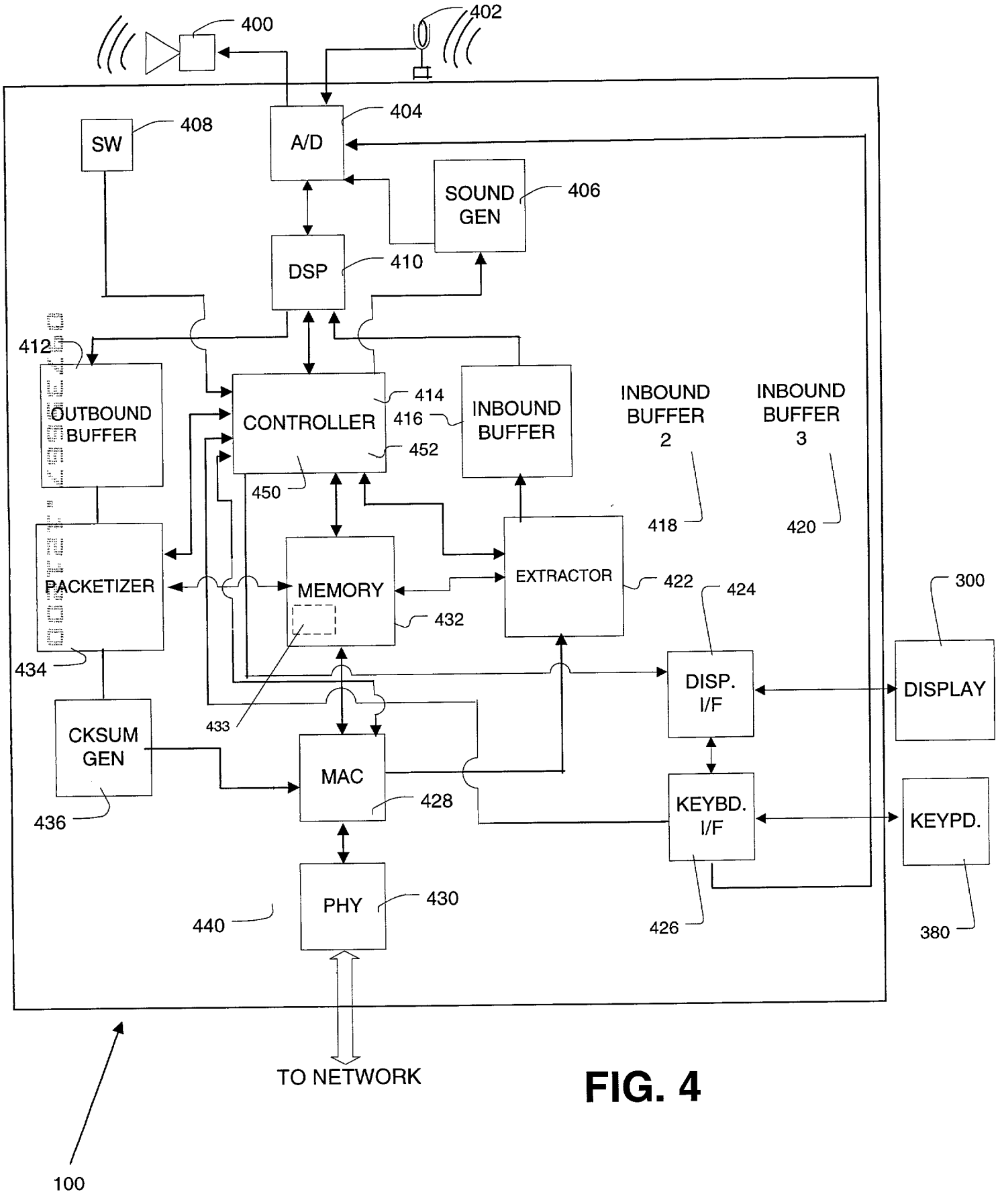
400
402
SW
408
A/D
404
SOUND GEN
406
DSP
410
412
OUTBOUND BUFFER
CONTROLLER
414
416
452
450
INBOUND BUFFER
INBOUND BUFFER 2
418
INBOUND BUFFER 3
420
PACKETIZER
MEMORY
432
EXTRACTOR
422
424
300
434
DISP. I/F
DISPLAY
CKSUM GEN
433
MAC
428
KEYBD. I/F
KEYPD.
436
PHY
430
440
426
380
TO NETWORK
100

FIG. 4

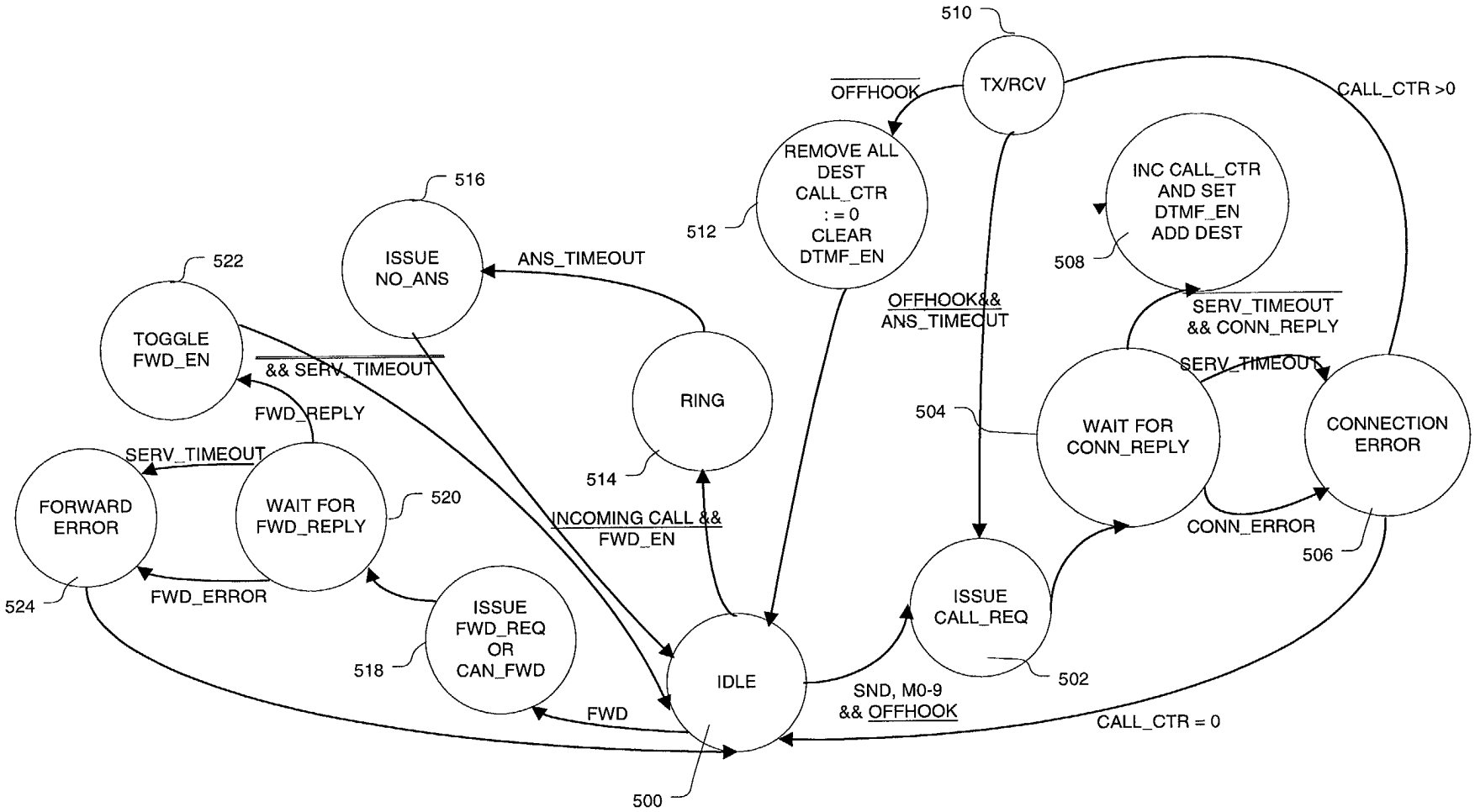
510
TX/RCV
OFFHOOK
CALL_CTR >0
REMOVE ALL DEST CALL_CTR : = 0 CLEAR DTMF_EN
512
INC CALL_CTR AND SET DTMF_EN ADD DEST
508
516
ISSUE NO_ANS
ANS_TIMEOUT
522
TOGGLE FWD_EN
&& SERV_TIMEOUT
FWD_REPLY
SERV_TIMEOUT
FORWARD ERROR
WAIT FOR FWD_REPLY
520
524
FWD_ERROR
RING
514
OFFHOOK&& ANS_TIMEOUT
SERV_TIMEOUT && CONN_REPLY
SERV_TIMEOUT
504
WAIT FOR CONN_REPLY
CONNECTION ERROR
CONN_ERROR
506
INCOMING CALL && FWD_EN
ISSUE FWD_REQ OR CAN_FWD
518
ISSUE CALL_REQ
502
IDLE
SND, M0-9 && OFFHOOK
FWD
CALL_CTR = 0
500

FIG. 5

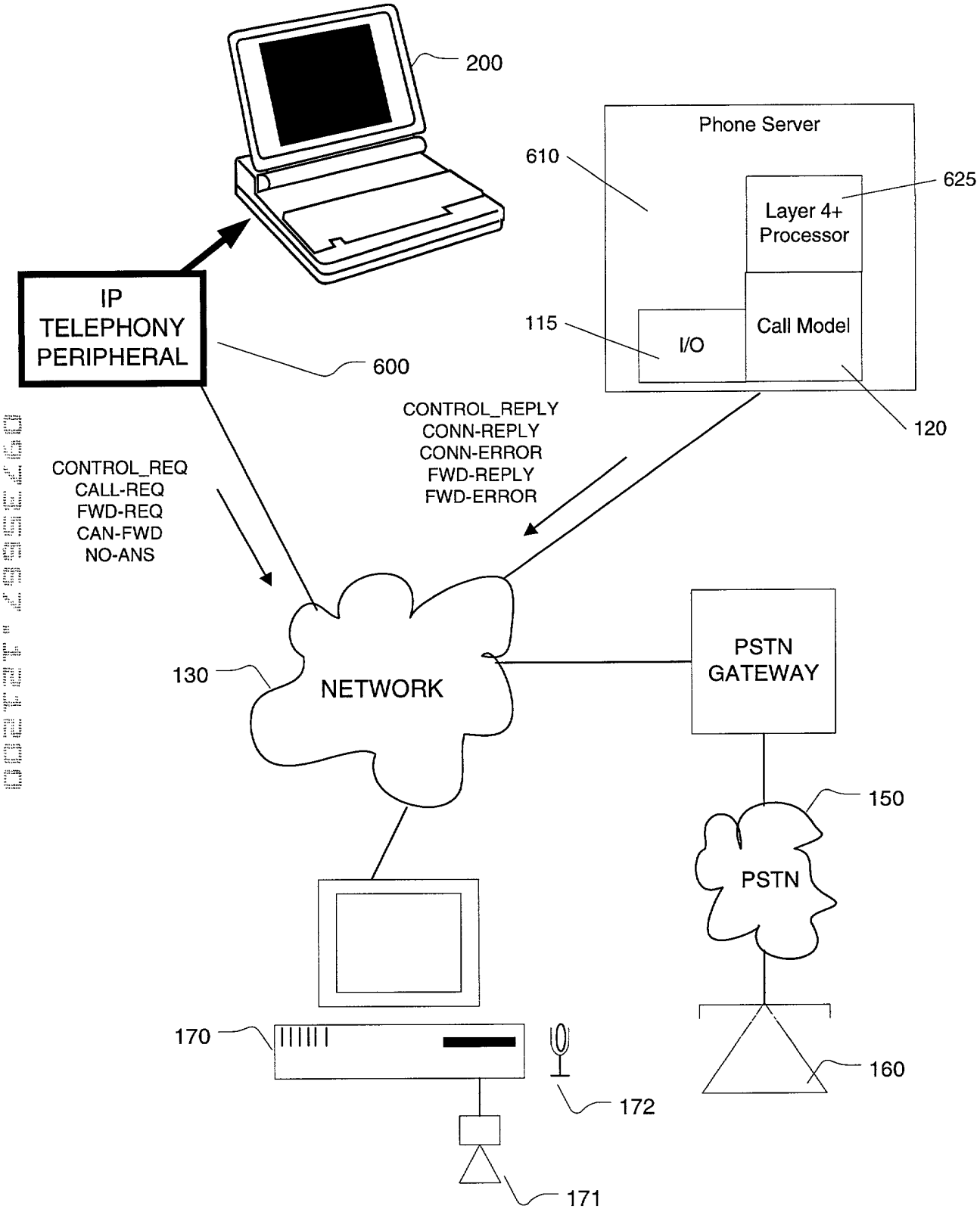
200
Phone Server
610
625
Layer 4+
Processor
IP
TELEPHONY
PERIPHERAL
115
I/O
Call Model
600
120
CONTROL_REPLY
CONN-REPLY
CONN-ERROR
FWD-REPLY
FWD-ERROR
CONTROL_REQ
CALL-REQ
FWD-REQ
CAN-FWD
NO-ANS
130
NETWORK
PSTN
GATEWAY
150
PSTN
170
172
160
171

FIG. 6

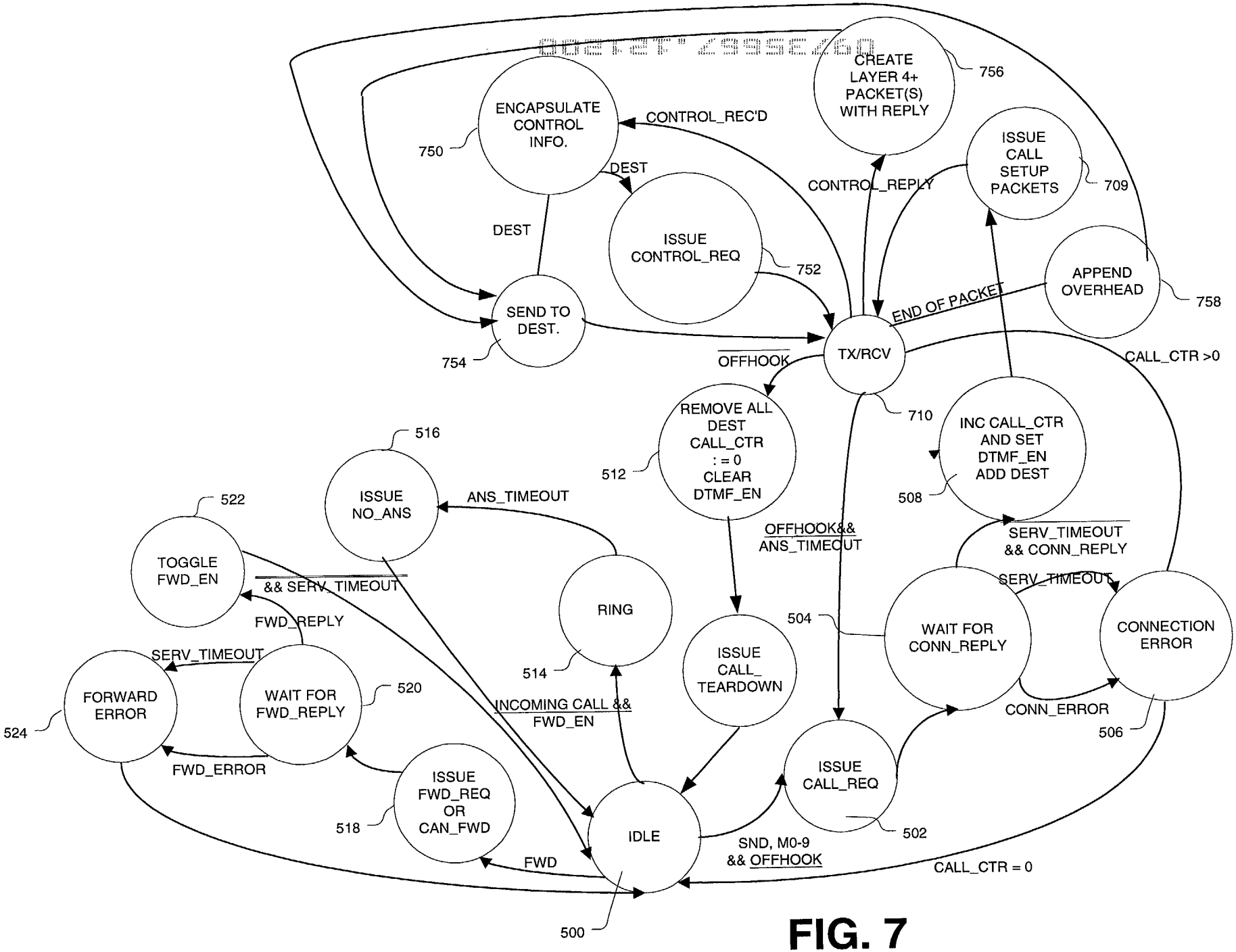
ENCAPSULATE CONTROL INFO.
750
CONTROL_REC'D
DEST
DEST
ISSUE CONTROL_REQ
752
SEND TO DEST.
754
CREATE LAYER 4+ PACKET(S) WITH REPLY
756
CONTROL_REPLY
ISSUE CALL SETUP PACKETS
709
APPEND OVERHEAD
758
END OF PACKET
TX/RCV
OFFHOOK
CALL_CTR >0
710
REMOVE ALL DEST CALL_CTR : = 0 CLEAR DTMF_EN
512
INC CALL_CTR AND SET DTMF_EN ADD DEST
508
OFFHOOK&& ANS_TIMEOUT
SERV_TIMEOUT && CONN_REPLY
SERV_TIMEOUT
516
ISSUE NO_ANS
ANS_TIMEOUT
522
TOGGLE FWD_EN
&& SERV_TIMEOUT
FWD_REPLY
SERV_TIMEOUT
RING
514
ISSUE CALL_ TEARDOWN
504
WAIT FOR CONN_REPLY
CONNECTION ERROR
CONN_ERROR
506
FORWARD ERROR
524
WAIT FOR FWD_REPLY
520
INCOMING CALL && FWD_EN
FWD_ERROR
ISSUE FWD_REQ OR CAN_FWD
518
ISSUE CALL_REQ
502
IDLE
FWD
SND, M0-9 && OFFHOOK
CALL_CTR = 0
500

FIG. 7